



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification⁵ : A61K 49/00, 49/04, 9/00	A3	(11) International Publication Number: WO 92/18165 (43) International Publication Date: 29 October 1992 (29.10.92)
(21) International Application Number: PCT/US92/01922 (22) International Filing Date: 11 March 1992 (11.03.92) (30) Priority data: 685,211 12 April 1991 (12.04.91) US (71) Applicant: ALLIANCE PHARMACEUTICAL CORP. [US/US]; 3040 Science Park Road, San Diego, CA 92121 (US). (72) Inventor: KIRKLAND, Dean, W. ; 1841 Oldfield Court, El Cajon, CA 92019 (US). (74) Agents: SIMPSON, Andrew, H. et al.; Knobbe, Martens, Olson and Bear, 620 Newport Center Drive, 16th Floor, Newport Beach, CA 92660 (US).	(81) Designated States: AT (European patent), AU, BE (Euro- pean patent), CA, CH (European patent), DE (Euro- pean patent), DK (European patent), ES (European pa- tent), FR (European patent), GB (European patent), GR (European patent), IT (European patent), JP, LU (Euro- pean patent), MC (European patent), NL (European pa- tent), SE (European patent). Published <i>With international search reports.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i> (88) Date of publication of the international search report: 10 December 1992 (10.12.92)	
(54) Title: IMPROVED FLUOROCARBON CONTRAST MEDIA FOR USE WITH MRI AND RADIOGRAPHIC IMAG- ING (57) Abstract The invention relates to a non-aqueous fluorocarbon composition for use in magnetic resonance imaging (MRI) or radiog- raphic imaging (X-ray or computed tomography), particularly imaging of the gastrointestinal (GI) tract. The invention also re- lates to an improved fluorocarbon composition with enhanced contrast effects in the GI tract. This invention further discloses an improved fluorocarbon composition having improved palatability. The invention further provides improved preparations for ra- diographic imaging or MRI. Methods for producing and using such preparations are disclosed, as are methods for improving the palatability of non-aqueous liquids. Finally, methods for improving imaging are disclosed.		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	FI	Finland	MI	Mali
AU	Australia	FR	France	MN	Mongolia
BB	Barbados	GA	Gabon	MR	Mauritania
BE	Belgium	GB	United Kingdom	MW	Malawi
BF	Burkina Faso	GN	Guinea	NL	Netherlands
BG	Bulgaria	GR	Greece	NO	Norway
BJ	Benin	HU	Hungary	PL	Poland
BR	Brazil	IE	Ireland	RO	Romania
CA	Canada	IT	Italy	RU	Russian Federation
CF	Central African Republic	JP	Japan	SD	Sudan
CG	Congo	KP	Democratic People's Republic of Korea	SE	Sweden
CH	Switzerland	KR	Republic of Korea	SN	Senegal
CI	Côte d'Ivoire	LI	Liechtenstein	SU	Soviet Union
CM	Cameroon	LK	Sri Lanka	TD	Chad
CS	Czechoslovakia	LU	Luxembourg	TC	Togo
DE	Germany	MC	Monaco	US	United States of America
DK	Denmark	MG	Madagascar		
ES	Spain				

III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)		
Category °	Citation of Document, with indication, where appropriate, of the relevant passages	Relevant to Claim No.
A	WO,A,9001901 (ALLIANCE PHARMACEUTICAL CORP.) 8 March 1990, see the whole document ---	
A	EP,A,0401377 (OTSUKA PHARMACEUTICAL CO. LTD) 12 December 1990, see claims ---	
A	US,A,4074709 (KAPLAN) 21 February 1978, see the whole document (cited in the application) ---	
A	DE,A,2804234 (LINTON MEDICAL SERVICES LTD) 3 August 1978, see the whole document (cited in the application) -----	

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
THE WORDING USED IN CLAIM 1 IS ITSELF AMBIGUOUS AND HAS BEEN INTERPRETED TO MEAN A COMPOSITION OF A FLUORCARBON LIQUID AND A GAS GENERATING (AND PALATABILITY ENHANCING) PHARMALOGICAL OR BIOACTIVE AGENT (SEE PCT ART. 6).
2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

FOR FURTHER INFORMATION PLEASE SEE FORM PCT/ISA/206 SENT TO YOU 26-08-92.

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

CLAIMS 1-26

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

**ANNEX TO THE INTERNATIONAL SEARCH REPORT
ON INTERNATIONAL PATENT APPLICATION NO.**

US 9201922
SA 58496

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 02/11/92. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO-A- 9014846	13-12-90	AU-A- 5922290	07-01-91
		EP-A- 0474785	18-03-92
		US-A- 5114703	19-05-92
EP-A- 0118281	12-09-84	US-A- 4586511	06-05-86
		AU-B- 569492	04-02-88
		AU-A- 2504184	06-09-84
		CA-A- 1223037	16-06-87
		JP-A- 59196448	07-11-84
		US-A- 4775522	04-10-88
WO-A- 9001901	08-03-90	US-A- 4951673	28-08-90
		AU-A- 4210289	23-03-90
		EP-A- 0429539	05-06-91
		US-A- 4993415	19-02-91
EP-A- 0401377	12-12-90	JP-A- 2191229	27-07-90
		CA-A- 2000112	04-04-90
		CH-A- 677880	15-07-91
		GB-A- 2232592	19-12-90
		WO-A- 9003800	19-04-90
		AU-B- 624231	04-06-92
		AU-A- 5254090	11-04-91
		US-A- 4074709	21-02-78
DE-A- 2804234	03-08-78	GB-A- 1599881	07-10-81
		CA-A- 1119514	09-03-82
		FR-A, B 2381524	22-09-78
		JP-C- 1153047	30-06-83
		JP-A- 53133622	21-11-78
		JP-B- 57042612	09-09-82
		US-A- 4428924	31-01-84
		US-A- 4215103	29-07-80